

Table 1S. Age, gender and diagnosis of the recruited patients, and subgroup of inclusion.

Patient identification number	Age	Gender	Diagnosis	Subgroup	Patient identification number	Age	Gender	Diagnosis	Subgroup
207	75	M	FDT	NAD	262	70	M	FDT	NAD
209	74	F	AD	AD	265	82	M	FTD	NAD
212	58	M	FTD	NAD	266	77	M	LBD	NAD
215	63	F	polyneuropathy	C	270	82	F	AD	AD
216	67	M	PSP	NAD	278	79	M	AD	AD
219	29	M	epilepsy	C	287	66	M	PPA	NAD
221	63	M	FTD	NAD	310	67	M	AD	AD
235	81	F	AD	AD	315	79	M	FTD	NAD
236	81	F	AD	AD	317	78	F	VaD	C
239	69	M	FTD	NAD	318	85	M	FTD	NAD
240	77	M	FTD	NAD	320	72	M	FTD	NAD
241	73	M	FTD	NAD	329	62	M	PPA	NAD
242	79	M	FTD	NAD	333	35	M	narcolepsy	C
245	66	M	FTD	NAD	337	70	M	AD	AD
246	77	M	AD	AD	347	82	F	AD	AD
253	61	M	AD	AD	348	82	M	n.p. hydrocephalus	C
254	67	F	AD	AD	400	77	M	FTD	NAD
255	78	F	AD	AD	401	33	F	narcolepsy	C
256	69	F	AD	AD	403	82	M	AD	AD
261	56	M	psychiatric disorder	C	428	76	F	AD	AD
					429	34	F	narcolepsy	C

AD subgroup: patients with Alzheimer's dementia; NAD subgroup: patients with non-Alzheimer's degenerative dementia; C subgroup: patients with non-degenerative disorders; AD: Alzheimer's dementia; FTD: Fronto-temporal dementia; PSP: progressive supranuclear palsy; LBD: Lewi body dementia; VaD: Vascular dementia; PPA: Primary progressive aphasia; n.p. hydrocephalus: normal pressure hydrocephalus.

Table 2S. Correlation values between polysomnographic markers and clinical pathology markers.

Sleep efficiency (%):lathosterol (ng/mL)	$r^2= 0.0964$	$r= - 0.3104$	$p= 0.0892$	AHI (events/h):7KC (ng/mL)	$r^2= 0.0000$	$r= 0.0035$	$p= 0.9851$
Sleep efficiency (%):desmosterol (ng/mL)	$r^2= 0.0626$	$r= - 0.2503$	$p= 0.1745$	AHI (events/h): α -epoxyC (ng/mL)	$r^2= 0.0001$	$r= 0.0103$	$p= 0.9560$
Sleep efficiency (%):lanosterol (ng/mL)	$r^2= 0.0930$	$r= - 0.3050$	$p= 0.0953$	AHI (events/h): β -epoxyC (ng/mL)	$r^2= 0.0375$	$r= 0.1937$	$p= 0.2965$
Sleep efficiency (%):cholesterol(mg/L)	$r^2= 0.0216$	$r= - 0.1471$	$p= 0.4299$	AHI (events/h):triol (ng/mL)	$r^2= 0.0001$	$r= 0.0103$	$p= 0.9560$
Sleep efficiency (%):7 α OHC (ng/mL)	$r^2= 0.2202$	$r= - 0.4693$	$p= 0.0077$	AHI (events/h):24OHC (ng/mL)	$r^2= 0.0027$	$r= - 0.0515$	$p= 0.7832$
Sleep efficiency (%):7 β OHC (ng/mL)	$r^2= 0.1592$	$r= - 0.3990$	$p= 0.0262$	AHI (events/h):27OHC (ng/mL)	$r^2= 0.0564$	$r= 0.2374$	$p= 0.1985$
Sleep efficiency (%):7KC (ng/mL)	$r^2= 0.4242$	$r= - 0.6513$	$p= 0.0007$	TST90 (%):lathosterol (ng/mL)	$r^2= 0.0659$	$r= 0.2567$	$p= 0.1634$
Sleep efficiency (%): α -epoxyC (ng/mL)	$r^2= 0.1177$	$r= - 0.3431$	$p= 0.0588$	TST90 (%):desmosterol (ng/mL)	$r^2= 0.1417$	$r= 0.3765$	$p= 0.0368$
Sleep efficiency (%): β -epoxyC (ng/mL)	$r^2= 0.1339$	$r= - 0.3659$	$p= 0.0429$	TST90 (%):lanosterol (ng/mL)	$r^2= 0.1119$	$r= 0.3345$	$p= 0.0658$
Sleep efficiency (%):triol (ng/mL)	$r^2= 0.1046$	$r= - 0.3245$	$p= 0.0759$	TST90 (%):cholesterol (mg/L)	$r^2= 0.0283$	$r= 0.1681$	$p= 0.3660$
Sleep efficiency (%):24OHC (ng/mL)	$r^2= 0.0547$	$r= - 0.2339$	$p= 0.2050$	TST90 (%):7 α OHC (ng/mL)	$r^2= 0.1042$	$r= 0.3228$	$p= 0.0765$
Sleep efficiency (%):27OHC (ng/ml)	$r^2= 0.0360$	$r= - 0.1897$	$p= 0.3066$	TST90 (%):7 β OHC (ng/mL)	$r^2= 0.0578$	$r= 0.2405$	$p= 0.1926$
AHI (events/h):lathosterol (ng/mL)	$r^2= 0.0239$	$r= 0.1547$	$p= 0.4061$	TST90 (%):7KC (ng/mL)	$r^2= 0.0502$	$r= 0.2241$	$p= 0.2255$
AHI (events/h):desmosterol (ng/mL)	$r^2= 0.0050$	$r= 0.0706$	$p= 0.5079$	TST90 (%): α -epoxyC (ng/mL)	$r^2= 0.0315$	$r= 0.1776$	$p= 0.3393$
AHI (events/h):lanosterol (ng/mL)	$r^2= 0.0248$	$r= 0.1574$	$p= 0.3978$	TST90 (%): β -epoxyC (ng/mL)	$r^2= 0.0498$	$r= 0.2231$	$p= 0.2277$
AHI (events/h):cholesterol (mg/L)	$r^2= 0.0048$	$r= 0.0691$	$p= 0.7120$	TST90 (%):triol (ng/mL)	$r^2= 0.1319$	$r= 0.3632$	$p= 0.0446$
AHI (events/h):7 α OHC (ng/mL)	$r^2= 0.0065$	$r= 0.0806$	$p= 0.6664$	TST90 (%):24OHC (ng/mL)	$r^2= 0.0152$	$r= 0.1232$	$p= 0.5090$
AHI (events/h):7 β OHC (ng/mL)	$r^2= 0.0030$	$r= 0.0546$	$p= 0.7706$	TST90 (%):27OHC (ng/mL)	$r^2= 0.3060$	$r= 0.5532$	$p= 0.0012$

7 α OHC: 7 α -hydroxycholesterol; 7 β OHC: 7 β -hydroxycholesterol; 7KC: 7-ketocholesterol; α -epoxyC: α -epoxycholesterol; β -epoxyC: β -epoxycholesterol; 24OHC: 24-hydroxycholesterol; 27OHC: 27-hydroxycholesterol; AHI: apnea hypopnea index; TST90: total sleep time spent with oxygen saturation < 90%; p: p value.